



U.S. Department  
of Transportation  
**Research and  
Special Programs  
Administration**

400 Seventh St., S.W.  
Washington, D.C. 20590

**MAY 7 2002**

DOT-E 11167  
(ELEVENTH REVISION)

EXPIRATION DATE: March 31, 2004

(FOR RENEWAL, SEE 49 CFR § 107.109)

1. GRANTEE: The Columbiana Boiler Company  
Columbiana, OH  
(Former Grantee: Eco-Pak Specialty Packaging, a  
Division of the Columbiana Boiler Company)
2. PURPOSE AND LIMITATIONS:
  - a. This exemption authorizes the manufacture, marking, sale and use of a non-DOT specification double containment packaging described in Paragraph 7 for the transportation in commerce of the materials authorized by this exemption. This exemption provides no relief from any Hazardous Materials Regulations (HMR) other than as specifically stated herein.
  - b. The safety analyses performed in development of this exemption only considered the hazards and risks associated with transportation in commerce.
3. REGULATORY SYSTEM AFFECTED: 49 CFR Parts 106, 107 and 171-180.
4. REGULATIONS FROM WHICH EXEMPTED: 49 CFR §§ 172.101, 173.240, 173.241, 173.242, 173.243, 173.244 and 173.245 in that non-DOT specification packagings are not authorized except as prescribed herein.
5. BASIS: This exemption is based on the application of Columbiana Boiler Company dated March 22, 2002, submitted in accordance with § 107.109.

MAY 7 2002

6. HAZARDOUS MATERIALS (49 CFR § 172.101):

Proper Shipping Name/ Hazardous Material Description	Hazard Class/ Division	Identification Number ***	Packing Group
2- mercaptoethanol/thioglycol	6.1	UN2966	II
Allyl Alcohol	6.1	UN1098	I (hazard zone B)
Corrosive solids	8	various	I, II, III
Corrosive liquids*	8	various	I, II, III
Flammable solids	4.1	various	I, II, III
Flammable liquids*	3	various	I, II, III
Hexachlorocyclopentadiene	6.1	UN2646	I (hazard zone B)
Miscellaneous hazardous material	9	various	III
Organophosphorous pesticide, liquid, toxic, n.o.s.	6.1	UN3018	I
Poisonous liquids*	6.1	various	I, II, III
Poisonous liquids, flammable*	6.1	various	I, II, III
Poisonous liquid, flammable, n.o.s.	6.1	UN2929	I (hazard zone B)
Pyrophoric solids	4.2	various	I, II, III
Pyrophoric organometallic compound, n.o.s.	4.2	UN3203	I
Water-reactive solids	4.3	various	I, II, III

\* Materials which are poisonous by inhalation must meet the criteria contained in paragraph 7.a.(8). Hazard Zone A materials are not authorized.

MAY 7 2002

**\*\* Materials which have an identification number shown as "various" are authorized only if a bulk packaging is authorized in § 172.101 Hazardous Materials Table Column 8C.**

7. SAFETY CONTROL MEASURES:

a. PACKAGING -

(1) Prescribed packagings are Models A and B of a non-DOT specification container. Both models incorporate a double containment design consisting of an inner packaging constructed of steel, surrounded by insulation and enclosed in an outer steel packaging. The double walled vessel is mounted in an outer steel frame on a steel pallet. No bottom outlets are allowed. Both inner and outer packagings must have minimum wall thicknesses of 2.85 mm (0.112 inches) steel. The Model A inner packaging must have formed heads and the Model B inner packaging must have ASME flanged and dished heads, both with a minimum thickness of 3.2 mm (0.126 inches) steel prior to forming and 3.05 mm (0.120 inches) after forming. The Model A container must be as shown on Eco-Pak Drawing Number M7 Rev. 1 dated March 15, 2002 and the Model B container must be as shown on Eco-Pak Drawing Number 21089/60 Rev. 5 dated March 15, 2002 on file with OHMEA.

(2) The inner packaging must be of seamless or welded steel construction or a combination of both. All welds must be full penetration butt welds performed by qualified welders who use weld procedures that meet the requirements of Section IX of the ASME Code.

(3) All mountings such as skids, fastenings, brackets, lifting lugs, etc., must be designed to meet the requirements for tank mountings specified in § 178.245-4.

(4) Pressure relief devices must be provided to conform with the requirements of § 178.245-5(c) and § 173.32. All valves, fittings, accessories, safety devices, and gages must be protected against mechanical damage as specified in § 178.245-5(a) and (b).

MAY 7 2002

## (5) Packaging design criteria:

Model	Design Pressure	Gross Volume		Gross Weight	
		Minimum	Maximum	Minimum	Maximum
A	280 kPa 40 psig	450 L 119 Gal	946 L 250 Gal	2000 kg 4400#	2853 kg 6300#
B	690 kPa 100 psig	227 L 60 Gal	946 L 250 Gal	1000 kg 2200#	2853 kg 6300#

(6) Insulation in the side annulus must be equivalent to or greater than 154 mm (6 inches) thick fiberglass insulation compressed to 39 mm (1½ inches). Insulation in the ends must be equivalent to or greater than 39 mm (1½ inches) thick plywood. The insulation material must be compatible with both the inner and outer packagings. For materials which are poisonous by inhalation, the insulation system must be in conformance with the requirements contained in § 172.102(c)(3) Special Provision B14.

(7) Packages containing materials poisonous by inhalation must have the inner tank and fittings constructed of stainless steel material that is compatible with the lading. The minimum thickness requirements of § 172.102(c)(3) Special Provisions B32, T26 and T45 are waived.

(8) Materials with a vapor pressure greater than 310 kPa absolute (45 psia) at 46°C (115°F) are not authorized. Additionally, materials which are poisonous by inhalation must have a vapor pressure of less than 207 kPa absolute (30 psia) at 46°C (115°F).

b. TESTING - Each new package must be hydrostatically pressure tested for one hour at the following test pressures:

Model A	-- 414 kPa (60 psig)
Model B	-- 1034 kPa (150 psig)

MAY 7 2002

Additionally, each package must be hydrostatically retested and reinspected at least once every five years as specified in § 173.32(e) for DOT Specification 51 portable tanks, at the original qualification test gauge pressure shown above, for a period of 15 minutes.

8. SPECIAL PROVISIONS:

a. A person who is not a holder of this exemption, but receives a package covered by this exemption, may reoffer it for transportation provided no modifications or changes are made to the package and it is offered for transportation in conformance with this exemption and the HMR.

b. A current copy of this exemption must be maintained at each facility where the package is offered or reoffered for transportation.

c. Each packaging manufactured under the authority of this exemption must be either (1) marked with the name of the manufacturer and location (city and state) of the facility at which it is manufactured or (2) marked with a registration symbol designated by the Office of Hazardous Materials Exemptions and Approvals for a specific manufacturing facility.

d. A current copy of this exemption must be maintained at each facility where the package is manufactured under this exemption. It must be made available to a DOT representative upon request.

e. During transportation packages may not be stacked more than two high.

f. This exemption serves as a Competent Authority Approval (CA-9612005) issued by the Associate Administrator for Hazardous Materials Safety of the United States Department of Transportation, in accordance with Section 6.7.1.2 International Dangerous Goods (IMDG) Code.

MAY 7 2002

- g. MARKING - Each package must be marked on two sides, in letters and numerals at least 51 mm (2 inches) high on a contrasting background, "DOT-E 11167".
9. MODES OF TRANSPORTATION AUTHORIZED: Motor vehicle, rail freight, and cargo vessel.
10. MODAL REQUIREMENTS: A current copy of this exemption must be carried aboard each cargo vessel or motor vehicle used to transport packages covered by this exemption.
11. COMPLIANCE: Failure by a person to comply with any of the following may result in suspension or revocation of this exemption and penalties prescribed by the Federal hazardous materials transportation laws, U.S.C. 5101 et seq.:
- o All terms and conditions prescribed in this exemption and the Hazardous Materials Regulations, Parts 171-180.
  - o Registration required by § 107.601 et seq., when applicable.

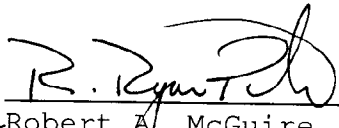
Each "Hazmat employee", as defined in § 171.8 who performs a function subject to this exemption must receive training on the requirements and conditions of this exemption in addition to the training required by §§ 172.700 through 172.704.

No person may use or apply this exemption, including display of its number, when the exemption has expired or is otherwise no longer in effect.

12. REPORTING REQUIREMENTS: The carrier is required to report any incident involving loss of packaging contents or packaging failure to the Associate Administrator for Hazardous Materials Safety (AAHMS) as soon as practicable. (Sections 171.15 and 171.16 apply to any activity undertaken under the authority of this exemption.) In addition, the holder of this exemption must also inform the AAHMS, in writing, as soon as practicable of any incidents involving the package and shipments made under this exemption.

MAY 7 2002

Issued in Washington, D.C.

  
for Robert A. McGuire  
Associate Administrator  
for Hazardous Materials Safety

MAY 7 2002

(DATE)

Address all inquiries to: Associate Administrator for  
Hazardous Materials Safety, Research and Special Programs  
Administration, Department of Transportation, Washington, D.C.  
20590.

Attention: DHM-31.

Copies of this exemption may be obtained by accessing the  
Hazardous Materials Safety Homepage at  
<http://hazmat.dot.gov/exemptions> Photo reproductions and  
legible reductions of this exemption are permitted. Any  
alteration of this exemption is prohibited.

po: sdc